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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/558,755
Filing Date: April 21, 2000
Appellant(s): HOSEA ET AL.

Eamon J. Wall
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 6, 2008 appealing from the Office action mailed July 9, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal No. 2006-1247, Application No. 09/558,755

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

USPN 6,285,987	Roth et al	09-2001
USPN 6,243,760	Armbruster et al	06-2001
USPN 6,208,975	Bull et al	03-2001
USPN 6,049,777	Sheena et al	04-2000
USPN 6,298,348	Eldering	10-2001
USPN 6,295,061	Park et al	09-2001
USPN 6,366,298	Haitsuka et al	04-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7-10, 13, 14, 20, 22, 24, 26-38, 42, 43, 46-57, and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Armbruster et al (USPN 6,243,760), in further view of Bull et al (USPN 6,208,975).

As per claim 1, Roth et al disclose a method of profiling a Web user (via view-opportunity/view-op, see column 2, lines 11-14), comprising: providing profiles on a plurality of Web sites (web site demographics, see column 9, lines 13-14 and column 18, lines 51-53); using a computer to monitor user access to said plurality of Web sites (see column 2, lines 14-19) and using a computer to develop a profile of the user based on the profiles of the Web sites accessed by the user (updates information via view-op, see column 4, lines 26-31).

Roth et al does not explicitly disclose identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP). Armbruster et al disclose a cache located at an ISP's point-of-presence (column 3, lines 34-36), wherein the ISP includes a local caching complex 10, consisting of servers and storage devices for identifying and storing cacheable web pages, filtering software, and web sites (column 3, lines 59-64), including the URLs associated with the cached items (column 4, lines 45-49).

Neither Roth et al nor Armbruster et al explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-

19), including user demographics. Roth, Armbruster, and Bull are concerned with effective storage and retrieval of information from the Internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP) and inferring user demographics based on web sites visited in Roth, as seen in Armbruster and Bull, respectively thus allowing Internet web content to be stored at the local ISP (see Armbruster, column 2, lines 45-47), and increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 2, Roth et al disclose data selected from demographic data (see column 2, lines 14-19).

As per claim 3, neither Roth et al nor Bull et al explicitly disclose said demographic data is selected from the group consisting of user's age, gender, income, and highest attained education level. However, Roth discloses Web site demographics data (see column 9, lines 13-14), and it is old and well known that age, gender, income, and highest attained education level are demographic attributes, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include those attributes as part of the demographic information collected in Roth et al, thereby collecting more information on the customer, thus determining a more accurate profile.

As per claims 7-8, Roth et al disclose psychographic data including data on the user's interests (viewer history data, see column 8, lines 65-67).

As per claim 9, Roth et al disclose providing a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites (database 16D, see column 18, lines 51-53).

As per claim 10, neither Roth et al nor Bull et al disclose said database provided by a Web site ratings service. However, Roth et al disclose Web site demographic data collected from commercial sources (see column 18, lines 51-53), therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a database provided by a Web site rating service in Roth et al, thereby providing a profile of the Website and more accurately determining the consumer profile.

As per claim 13, Roth et al disclose URL requests associated with a user and stored in a database (see column 4, lines 26-31).

As per claim 14, Roth et al disclose updating an existing user profile (see column 4, lines 30-31).

As per claim 20, Roth et al disclose delivering selective advertising to said user based on his or her profile (see column 4, lines 58-61).

Claims 22, 24, 26-29 are rejected based upon the rejection of claims 1, 9, 13, 19-21, respectively, since they are the computer claims corresponding to the method claims. Further, see Roth et al column 6, lines 53-56.

As per claim 30, Roth et al disclose the computer cooperates with a computer operated by the user to display an advertisement on a display of the computer

operated by the user, said advertisement being selected from a plurality of advertisements based on the profile of the user (see column 4, lines 58-61).

As per claim 31, Roth et al disclose a system for profiling a Web user and delivering selective advertising to the user, comprising: a database containing profile data on a plurality of Web sites (web site 14, see Figure 1); means for monitoring user access to said plurality of Web sites (see column 2, lines 14-19); means for developing a profile of the user using profile data of the Web sites accessed by the user (see column 4, lines 44-49); means for matching the user with an advertisement based on the developed user profile; and means for delivering said advertisement to the user (see column 4, lines 58-61).

Roth et al does not explicitly disclose by identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP). Armbruster et al disclose a cache located at an ISP's point-of-presence (column 3, lines 34-36), wherein the ISP includes a local caching complex 10, consisting of servers and storage devices for identifying and storing cacheable web pages, filtering software, and web sites (column 3, lines 59-64), including the URLs associated with the cached items (column 4, lines 45-49).

Neither Roth et al nor Armbruster et al explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Roth, Armbruster, and Bull are concerned with

effective storage and retrieval of information from the Internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP) and inferring user demographics based on web sites visited in Roth, as seen in Armbruster and Bull, respectively thus allowing Internet web content to be stored at the local ISP (see Armbruster, column 2, lines 45-47), and increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 32, Roth et al disclose a system for inferring a profile of a person using a client computer for Web surfing, and delivering selective advertising to the person based on his or her profile (see Figure 7), comprising: a local server computer linked to said client computer for providing Internet access (client browser 711), said local computer including: means for monitoring users access to a plurality of Web sites (see column 2, lines 14-19), means for developing a profile of the person based on predetermined profile data of the Web sites accessed by the person, and means for delivering an advertisement to the client computer (server 716); and a remote server computer linked to said local server computer and including means for matching an advertisement received from an advertiser to said person based on his or her profile, and means for transmitting said advertisement to said local server computer for eventual transfer to the client computer (server 730).

Roth et al does not explicitly disclose by identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP). Armbruster

et al disclose a cache located at an ISP's point-of-presence (column 3, lines 34-36), wherein the ISP includes a local caching complex 10, consisting of servers and storage devices for identifying and storing cacheable web pages, filtering software, and web sites (column 3, lines 59-64), including the URLs associated with the cached items (column 4, lines 45-49).

Neither Roth et al nor Armbruster et al explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Roth, Armbruster, and Bull are concerned with effective storage and retrieval of information from the Internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP) and inferring user demographics based on web sites visited in Roth, as seen in Armbruster and Bull, respectively thus allowing Internet web content to be stored at the local ISP (see Armbruster, column 2, lines 45-47), and increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 33, Roth et al disclose a local database containing data associating a plurality of Web sites with predetermined profile data on said sites (database 16B, see Figure 1).

As per claim 34, Roth et al disclose a master database containing data associating a plurality of Web sites with predetermined profile data on said sites, and wherein data in said master database is periodically synchronized with said local database. Database 16B (Figure 1) is the master and local database and synchronization is inherent.

As per claim 35, Roth et al disclose the local server computer and the remote server computer linked by an Internet connection (inter-computer network, see column 6, lines 56-58).

As per claim 36, Roth et al disclose means for delivering URL string pointing to the advertisement (see column 12, line 53).

Claims 37, 38, 42, 43, 46-50 are rejected based on the rejections of claims 2, 3, 7, 8, and 15-19, respectively as being the system claims corresponding to the method claims.

As per claim 51, Roth et al disclose means for monitoring how long the advertisement is displayed to the user (view-time, see column 8, lines 61-62).

As per claim 52, Roth et al disclose means for monitoring whether the user has clicked-through the advertisement (see column 8, lines 1-2).

Claim 53 is rejected based upon the rejection of claim 1, since it is the computer readable medium claim corresponding to the method claim.

As per claims 54-55, Roth et al disclose the medium comprises a removable memory (see column 9, lines 19-21), and a signal transmission (see column 10, lines 34-36).

As per claim 56, Roth et al disclose computerized method of profiling Web users and selectively delivering content to said users, comprising: providing profiles of a plurality of Web sites (web site demographics, see column 9, lines 13-14 and column 18, lines 51-53), said profiles including demographic data of persons known to have visited said sites (see column 9, lines 1-14); electronically monitoring each users access of said plurality of Web sites (see column 2, lines 14-19); developing a profile of each user based on the profiles of the Web sites visited by the user (see column 4, lines 44-49); identifying a target group of said users who would be receptive to receiving certain content based on their profiles; and selectively delivering the content to users of that target group (see column 13, lines 53-56).

Roth et al does not explicitly disclose by identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP). Armbruster et al disclose a cache located at an ISP's point-of-presence (column 3, lines 34-36), wherein the ISP includes a local caching complex 10, consisting of servers and storage devices for identifying and storing cacheable web pages, filtering software, and web sites (column 3, lines 59-64), including the URLs associated with the cached items (column 4, lines 45-49).

Neither Roth et al nor Armbruster et al explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Roth, Armbruster, and Bull are concerned with

effective storage and retrieval of information from the Internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP) and inferring user demographics based on web sites visited in Roth, as seen in Armbruster and Bull, respectively thus allowing Internet web content to be stored at the local ISP (see Armbruster, column 2, lines 45-47), and increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 57, Roth et al disclose the content comprises advertisements (see column 4, lines 58-61)

As per claim 62, Roth et al does not explicitly disclose adjusting the target group to optimize user responsiveness to the content (see column 13, lines 53-64). By adjusting the criteria in Roth et al, the target group is adjusted accordingly.

As per claim 63, Roth et al disclose an advertisement, and determining user responsiveness to the content comprises determining how many users have clicked-through the advertisement (see column 2, lines 41-46).

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Armbruster et al (USPN 6,243,760), in further view of Bull et al (USPN 6,208,975), in further view of Sheena et al (USPN 6,049,777).

As per claims 15 and 18, neither Roth et al nor Bull et al disclose combining the profiles of the Web sites accessed by the user to the existing user profile using an averaging algorithm and the average rating is determined using a clustering algorithm. Sheena et al disclose using an averaging algorithm to calculate a similarity factor between a pair of users (see column 8, lines 47-49), based on their ratings of a product. Sheena et al also disclose clustering algorithms (see column 22, lines 33-36) used to calculate the mean of the rating given to each item a user has rated. Sheena et al also disclose the method working equally as well for items having many features of interest (see column 19, lines 9-13), such as web site and user profiles. Further, both Roth et al and Sheena et al are concerned with user profiles, and product recommendation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include using an averaging algorithm to combine the profiles of the web site and user and determining the average rating using a clustering algorithm in Roth et al, thereby improving the profile of the user, thus providing more targeted advertisement.

As per claims 16-17, neither Roth et al nor Bull et al disclose user profile includes data on a plurality of demographic categories, each associated with a rating, and the method further comprises filling in a value for the rating for any demographic category having a low confidence measure and using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure. Sheena et al disclose using an averaging algorithm to calculate a similarity factor between a pair of users (see column 8, lines 47-49), based on their

ratings of a product. Further, Sheena et al disclose items with low confidence factors (see column 10, line 10), and correlation between neighboring users (see column 10, lines 20-23). Both Roth et al and Sheena et al are concerned with user profiles, and product recommendation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include filling in a value for the rating for any demographic category having a low confidence measure and using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure, in Roth et al, thereby being able to fill in incomplete user profiles, thus making the method more robust.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Armbruster et al (USPN 6,243,760), in further view of Bull et al (USPN 6,208,975), in further view of Eldering (USPN 6,298,348).

As per claim 19, neither Roth et al nor Bull et al explicitly disclose erasing records of which Web sites said user has visited after developing the user's profile to protect user privacy. Eldering discloses maintaining consumer privacy via private data networks (see column 4, lines 62-65). Both Roth and Eldering are concerned with consumer demographic information collection, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include maintaining consumer privacy in Roth et al, as seen in Eldering, via deletion of records, thus securing consumer privacy making the system more effective.

Claims 21 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Armbruster et al (USPN 6,243,760), in further view of Bull et al (USPN 6,208,975), in further view of Park et al (USPN 6,295,061).

As per claims 21 and 58-59, neither Roth et al nor Bull et al disclose transmitting pop-up and banner advertisements to a display of a computer operated by the user. Park et al disclose banner advertisement (see column 1, lines 30-33), and pop-up advertisement over the internet (see column 2, lines 1-2). Both Roth et al and Park et al are concerned with effective advertising via the internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include pop-up and banner advertisement in Roth et al, as a means of reaching the consumer to provide information on a product.

As per claim 60, Roth et al disclose means for monitoring how long the advertisement is displayed to the user (view-time, see column 8, lines 61-62).

As per claim 61, Roth et al disclose means for monitoring whether the user has clicked-through the advertisement (see column 8, lines 1-2).

Claim 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Armbruster et al (USPN 6,243,760), in further view of Bull et al (USPN 6,208,975), in further view of Haitsuka et al (USPN 6,366,298).

As per claim 25, neither Roth et al nor Bull et al disclose the program including a sniffer identifying URL requests made by the user while Web surfing. Haitsuka et al

discloses a client monitoring device that grabs URL's from communication stream between the browser and web server (i.e., sniffer, see column 8, lines 56-60). Both Roth and Haitsuka are concerned with the effective monitoring of on-line viewers, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sniffer in Roth, as seen in Haitsuka, as an effective method of obtaining the viewers URL requests, thus making the Roth system more efficient.

(10) Response to Argument

In the Appeal Brief, Appellant argues 1) that the combination of Roth et al, Armbruster et al and Bull et al fails to teach or suggest using a computer to monitor user access to said plurality of web sites by identifying the URL requests made by the user at the internet service provider (ISP) point of presence (POP), and 2) there is no motivation to meaningfully combine Armbruster et al with Roth et al and Bull et al.

With respect to Argument 1, the Examiner respectfully disagrees. First, Roth et al discloses using a computer to monitor user access to said plurality of Web sites (see column 2, lines 14-19), wherein the fact the viewer has accessed a web page is referred to as a view opportunity, including demographic information about the viewer and what other sites the viewer has accessed. In addition, Armbruster et al disclose a cache located at an ISP's point-of-presence (column 3, lines 34-36), wherein the ISP includes a local caching complex 10, consisting of servers and

storage devices for identifying and storing cacheable web pages, filtering software, and web sites (column 3, lines 59-64), including the URLs associated with the cached items (column 4, lines 45-49), thus allowing Internet web content to be stored at the local ISP (column 2, lines 45-47). As a result, and contrary to Appellant's argument, Armbruster et al indeed discloses using a computer to monitor user access to said plurality of web sites (i.e., storing cacheable web pages, including the URLs associated with the cached items) by identifying the URL requests made by the user at the ISP point of presence (i.e., cache located at an ISP's point of presence). Accordingly, the combination of Roth et al, Armbruster et al and Bull et al indeed disclose the limitations of claim 1, and similarly independent claims 22, 31, 32, 53 and 56.

With respect to Argument 2, the Examiner respectfully disagrees. First, as discussed in the *KSR International Co. v. Teleflex Inc. et al.*, 550 U.S. ____(2007), "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) ('[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness'). As

our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." Here, Armbruster et al is concerned with the storage of Internet web content at the provider level (column 2, lines 45-47), which is particularly relevant in determining what sites a viewer has accessed in various periods of time, the issue addressed in Roth et al.

Moreover, the rationale employed by the Examiner in combining Armbruster et al with Roth et al and Bull et al is combining prior art elements according to known methods to yield predictable results. With respect to claim 1, as an example, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include identifying the URL requests made by the user at the Internet Service Provider (ISP) point of presence (POP) and inferring user demographics based on web sites visited in Roth et al, as seen in Armbruster et al and Bull et al, respectively, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Andre Boyce/

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May 20, 2008

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